

# EXHIBIT 11

## *Research Handbook on the Economics of Antitrust Law*

Antitrust Damages

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**I. Introduction**

Antitrust private actions have been an important component of civil enforcement in the United States since the passage of the Clayton Act.<sup>1</sup> Private actions have been seen, in combination with public enforcement, as a means of achieving an appropriate level of deterrence. However, they have also been viewed as a mechanism for compensating those who were injured by illegal anticompetitive activities.<sup>2</sup> In recent years, private antitrust enforcement has been growing outside the U.S. Such actions are now available in parts of Asia (e.g., Japan) and in England. Private actions will almost certainly grow throughout the European Union as well.<sup>3</sup>

To obtain a financial recovery in a private action, the plaintiff must prove three distinct elements: (1) an antitrust violation; (2) antitrust injury;<sup>4</sup> and (3) damages – a measure of the extent of the injury. In this paper, I focus entirely on the important third element – antitrust damages. While much of the analysis is conceptual in nature, the analytical details do depend on

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<sup>1</sup> Section 4 of the Clayton Act provides for private actions with treble damages as a remedy. 15 U.S.C. § 15 (2009).

<sup>2</sup> For an insightful discussion of the objectives associated with the payment of antitrust damages, see Herbert Hovenkamp, *Damages*, in *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* (3d ed. 2005).

<sup>3</sup> See, e.g., COMMISSION OF THE EUROPEAN COMMUNITIES, *Green Paper on Damages Actions for the Breach of EC Antitrust Rules*, (2005); COMMISSION OF THE EUROPEAN COMMUNITIES, *White Paper on Damages Actions for Breach of the EC Antitrust Rules*, (2008).

<sup>4</sup> In *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977), the Court ruled that damages can be recovered only for injuries that flow from the wrongful anticompetitive conduct.

yardstick approach, one compares prices, margins, or rates of return during the period in which the antitrust violation is believed to have had an effect (the “impact period”) to prices, margins, or rates of return in other markets that are deemed to be reasonably comparable to the market at issue. In contrast, the benchmark approach evaluates prices only in the market at issue, comparing prices in the impact period to available prices before and/or after the alleged period of impact (the “non-impact period”). I comment first on the yardstick approach, after which I consider benchmarks.<sup>12</sup>

### **A. Yardsticks**

Under the yardstick approach, damages are measured by obtaining a “but-for price” from a market (the “comparable market”) that closely approximates the market in which the violation occurred.<sup>13</sup> The “but-for price” is a measure of what the price of the product would be if the

wrongful behavior had not occurred. A yardstick can come from a different, but related product market in the same or similar geographic market or from a different, but related geographic market in which the same product or products are sold.

Ideally, the comparable market product should reflect the same degree of competition, the same costs, and the same demand conditions that would have prevailed in the market at issue had there been no wrongful behavior. Of course, it is quite possible for there to be no suitable yardstick in some cases. If an appropriate yardstick is available, it is important to take into account any differences in costs and the extent of competition between the yardstick market and the market at issue in the but-for world.

Regression analysis offers one tool that can be useful in a yardstick analysis. To illustrate, suppose that there are available price data for the market at issue in a case and for the yardstick market. Suppose also that the yardstick market and the market at issue are both

<sup>12</sup> For a broad discussion of these alternative measures, see Hovenkamp, *supra* note 2.

<sup>13</sup> The yardstick approach was first cited by the Supreme Court in *Bigelow v. RKO Radio Pictures, Inc.*, 327 U.S. 251, *rehearing denied*, 327 U.S. 817 (1946).

differentiated product markets subject to Bertrand competition. However, the yardstick market has fewer firms and a lesser degree of competition among those firms. Then, a regression analysis relating price in the yardstick market to one or more measures of the degree of competition could allow one to predict what prices in the yardstick market would be when the degree of competition was the same as in the market at issue. This “adjusted yardstick” price series could be used as the but-for price in the damages analysis in the case.<sup>14</sup>

### **B. Benchmarks<sup>15</sup>**

In essence, the benchmark approach involves using the periods before and/or after the alleged wrongful behavior as a yardstick. As with the yardstick approach, it is essential that the non-impact period be as similar as possible to the impact period. This requires that one take into account any cost, demand, or competitive differences between the non-impact behavior and the impact period, but for the wrongful behavior. However, the benchmark approach does have one potentially important advantage in comparison to the yardstick approach. If sufficient data are available, regression analysis can be used to distinguish the effects of the alleged wrongful behavior on price from those effects that are not causally related to that behavior.

To be specific, when the time period or periods in which the alleged antitrust behavior impacted prices is sufficiently long and the necessary data are available, a standard approach to the evaluation of damages is to estimate a regression model for prices using only data for the non-impact period in which the market was unimpeded and to utilize that regression model to predict but-for prices in the impact period.<sup>16</sup> This “forecasting” (or “before-after”) approach relies heavily on the assumption that the regression specification adequately characterizes the

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<sup>14</sup> A similar approach could be used if one were analyzing profit margins or rates of return. However, an appropriate margin analysis must account not only for pricing differences, but also for differences in costs between the two markets.

<sup>15</sup> This section borrows heavily from Justin McCrary & Daniel L. Rubinfeld, *Measuring Benchmark Antitrust Damages*, (2009), (unpublished draft) (on file with authors).

<sup>16</sup> There must be sufficiently variability to allow one to appropriately account for non-collusive variables that might have affected price in the impact period.